

### **REMARKS**

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

#### **Disposition of Claims**

Claims 1-17 are pending in this application. Claims 1 and 12 are independent. The remaining claims depend, directly or indirectly, from claims 1 and 12.

#### **Rejection(s) under 35 U.S.C § 102**

The present invention provides polymeric electrochemical cell components having a perimeter edge reinforced by a band or hoop. The band or hoop is preferably made from a material having a high tensile strength that resists elongation under tension. As explained in the specification, preferred materials for forming the band include fibers, such as aromatic polyamide fibers. It is also highly preferred that the band be integrated with the polymer component, to avoid increasing the part count and to avoid the difficulties of positioning the band around a separate component. In one embodiment, the preferred band comprises aromatic polyamide fibers mixed with a polymer binder that may be the same polymer as the remainder of the frame. Using the same kind of polymer to form the frame and to bind the polyamide fibers helps avoid delamination of the fibers as well as avoid different dimension changes of the band and of the frame during thermal cycling due to different materials having different expansion coefficients.

Claims 1-10 and 12-17 stand rejected under 35 U.S.C. 102(e) as being anticipated by Milgate et al. (US Patent 6,852,441). However, the Examiner has observed that Milgate fails to teach that the reinforcing bands comprise an aromatic polyamide. In fact, Milgate fails to teach the use of any reinforcing fibers in the reinforcing band.

Claim 1 has been amended to clarify the present invention. None of the references show or suggest, *inter alia*, a generally planar polymer component for use in a high pressure electrochemical cell, wherein the polymer composite band comprises reinforcing fibers mixed with a polymer binder. Furthermore, none of the references show or suggest a polymer composite band integrated with the polymer component, as now recited in Claim 1. Thus, Claim

1 is allowable as amended.

Claims 2-5 have been cancelled, making their rejection moot.

Claims 6-10 depend from Claim 1, and are allowable for at least the same reasons. Claims 6-10 have also been amended consistent with the amendment to claim 1.

Claim 18, which depends from claim 1, has been added in this reply to reflect the preferred use of the same kind of polymer to form the frame and to bind the polyamide fibers.

Claims 12-17 have been cancelled in this reply, making their rejection moot.

**Rejection(s) under 35 U.S.C § 103**

As explained in the specification, the reinforcing band according to the present invention is preferably not electrically conductive.

Claim 11 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Milgate et al. in view of Yeager et al. (US Pre-Grant Publication 2002/0177027). The Examiner relies on Yeager in combination with Milgate to support a contention of obviousness, namely, that it would have been obvious to combine the reinforcing fibers of Yeager in the reinforcing bands of Milgate. However, Yeager teaches a *conductive* thermoset composition for use in electrochemical cells. More specifically, Yeager teaches a composition that provides a "highly desirable combination" of properties, including, "high conductivity." Yeager warns that "at least one of these properties is compromised if *any* of the components is omitted." Because Yeager's conductive thermoset composition would not be suitable in reinforcing bands that are preferably not electrically conductive, one skilled in the art would not look to Yeager in constructing a reinforcing band according to the present invention that is preferably not electrically conductive.

Furthermore, Claim 11 now depends from an allowable Claim 1, as currently amended, and is allowable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Claims 13 and 14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Milgate et al. Claims 13 and 14 have been cancelled in this reply, making their rejection moot. Accordingly, withdrawal of this rejection is respectfully requested.

In view of the above, the references relied upon by the Examiner fail to show or suggest

the present invention as recited in the claims, as currently amended. Accordingly, withdrawal of these rejections is respectfully requested.

In the event there are additional charges in connection with the filing of this Response, the Commissioner is hereby authorized to charge the Deposit Account No. 50-0714/LYNN-0169 of the firm of the below-signed attorney in the amount of any necessary fee.

Respectfully submitted,

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